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APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT PAPER NUMBER

1771

DATE MAILED: 12/10/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/581,040

Applicant(s)

DE MEYER ET AL.

Examiner

Norca L. Torres-Velazquez

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-41 is/are pending in the application.
- 4a) Of the above claim(s) 40 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 31-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 35) ☐ Notice of References Cited (PTO-990)
- 41) ☐ Interview Summary (PTO-413) Paper Notice

DETAILED ACTION

1. Applicant's arguments and amendment filed on October 7, 2002 have been fully considered.
2. Newly submitted claims 40-41 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 40 and 41 are drawn to a process and the present claimed product can be made by a different process such as one that bonds the outer layer and to the textile reinforcement layer in a first step and then bond that laminate to the inner layer in a second step.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 40 and 41 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

3. Applicants have argued that the Chudgar et al. reference does not disclose a reinforcement layer in which the stiffening acts primarily in a direction different from the longitudinal axis of the body to be stiffened.

The Examiner agrees with Applicants in that the Chudgar et al. reference does not explicitly disclose a reinforcement layer in which the stiffening acts primarily in a direction different from the longitudinal axis of the body to be stiffened, however, the Chudgar et al. reference teaches the use of hose reinforcement layer such as braided, spiral wrapped or knitted

Art Unit: 1771

Therefore, the textile construction or arrangement of the thermoplastic material is the variable that will cause the claimed effect in the stiffening.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over CHUDGAR et al. (US 3,944,453) in view of MEZZALIRA (US 6,199,594 B1).

CHUDGAR et al. discloses an improved hose construction wherein a thermally formed, fused bonding layer is provided autogenously with the outer surface portion of the core tube and defining a mechanical interlock with the inner surface portion of a fibrous reinforcement layer. (Column 2, lines 33-38)

The reinforcement layer may be formed of a thermoplastic material having a higher fusion temperature than that of the core tube so as to assure the provision of the desired mechanical interlock between the bonding layer and reinforcement layer and autogenously weld between the bonding layer and the inner portion of the core tube. The reinforcement layer may comprise any suitable reinforcement material providing the desirable mechanical interlocked association with the fused bonding layer. The added layer may comprise a thin thermoplastic

REINFORCEMENT LAYER AS DESIRED BY CLAIM 2, LINES 1-3, 5-8 THROUGH CLAIM 3, LINES 1-2, 4-5

It is noted that all thermoplastic construction will stiffen when exposed to cold and soften when exposed to heat.

Further, the reference discloses that the reinforcement layer may comprise any suitable reinforcement including braided, spiral wrapped, knitted, or other conventional forms of hose reinforcement constructions. The reinforcement layer may be formed of a fibrous fabric, which may comprise organic, synthetic resin, or metallic fibrous material. Where the reinforcement layer material is a thermoplastic, the fusion temperature thereof preferably is higher than that of the bonding layer. (Column 4, lines 17-25)

However, the reference does not explicitly disclose a reinforcement layer in which the stiffening acts primarily in a direction different from the longitudinal axis of the body to be stiffened.

MEZZALIRA discloses a reinforced flexible hose that includes at least one inner tubular layer of plastic or rubber, a knitted reinforcement and an outer layer. The knitted reinforcement layer is provided in the form of a single tubular layer and is wrapped around the outer surface of the inner tubular layer. (Abstract)

Further, the reference teaches the use of a knitted reinforcement of the chain type in which the rows and lines of stitches are substantially helical with respective longitudinal pitches and inclinations which are mutually opposite with respect to the longitudinal axis, so as to eliminate the torque applied by the pressure of the fluid inside it. (Column 2, lines 33-52). The

Art Unit: 1771

in case of normal chain stitches, for example with substantially longitudinal lines, is canceled out. (Column 3, lines 53-59).

Since CHUDGAR et al. and MEZZALIRA are both from the same field of endeavor, the purpose disclosed by MEZZALIRA would have been recognized in the pertinent art of CHUDGAR et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the reinforcement layer of CHUDGAR et al. and provide it with a crossed and inclined arrangement with the motivation of canceling the torque that occurs in the hoses with normal chain stitches as disclosed by MEZZALIRA.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this

examiner should be directed to Noreia L. Torres-Velazquez whose telephone number is 703-306-

Art Unit: 1771

5714. The examiner can normally be reached on Monday-Thursday 8:30-3:00 pm and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

nlt

December 8, 2002

Michael D. [unclear]
703-308-0661